CONTENTS OF VOLUME 107

	Nootton, and P. D. Boersma
PLOVERS.	PERATURES AND BEHAVIOR OF CROWNED, BLACK-WINGED, AND LESSER BLACK-WINGED David Ward
E. Mirarchi,	TIVITY BUDGETS OF HATCHING-YEAR MOURNING DOVES. Michael P. Losito, Ralph and Guy A. Baldassarre
	IETRICS, AGE STRUCTURE, AND PARTIAL MIGRATION OF URBAN MERLINS. Ian G. Paul C. James, and Lynn W. Oliphant
	NOT IMPORTANT FOR FEMALE REPRODUCTIVE SUCCESS IN THE COMMON ROSEFINCH IS ERYTHRINUS). Mats Björklund
A COMPARATIVE Veiga	STUDY OF REPRODUCTIVE ADAPTATIONS IN HOUSE AND TREE SPARROWS. José P.
	NES IN RELATION TO TERRITORIALITY, BREEDING DENSITY, AND PARENTAL BEHAVIOR LLOW-HEADED BLACKBIRDS. Les D. Beletsky, Gordon H. Orians, and John C. Wing-
	TRICS ARE NOT ADEQUATE TO MEASURE AVIAN BODY SIZE. Scott Freeman and lackson
NUTRIENT RESER	EVE DYNAMICS OF BREEDING CANVASBACKS. Jeb A. Barzen and Jerome R. Serie
	D ECOLOGICAL CORRELATES OF TERRITORY QUALITY IN THE EURASIAN NUTHATCH PAEA). Erik Matthysen
	INTS OF RAPTORS AT HAWK MOUNTAIN, PENNSYLVANIA, AS INDICATORS OF POPULA- DS, 1934–1986. James C. Bednarz, Daniel Klem Jr., Laurie J. Goodrich, and Stanley
	PATTERNS OF SIZE AND SHAPE OF THE NASAL GLAND DEPRESSION IN PHALACRO- Douglas Siegel-Causey
EFFECTIVENESS C	OF SOCIAL STIMULI IN ATTRACTING LAYSAN ALBATROSS TO NEW POTENTIAL NESTING Thard H. Podolsky
	EST-SITE FIDELITY, AND REPRODUCTIVE PERFORMANCE IN BUFFLEHEADS. Gilles Gau-
	ND TEMPORAL VARIATION IN FORAGING ECOLOGY OF PROTHONOTARY WARBLERS E BREEDING SEASON. Lisa J. Petit, Daniel R. Petit, Kenneth E. Petit, and W. James
ANNUAL VARIA SEASON I	TION IN FORAGING ECOLOGY OF PROTHONOTARY WARBLERS DURING THE BREEDING isa J. Petit, Daniel R. Petit, Kenneth E. Petit, and W. James Fleming
COMPARATIVE CRACKER.	BREEDING BIOLOGY OF THE TWO BILL MORPHS OF THE BLACK-BELLIED SEED- Thomas Bates Smith
	PHOMETRIC, AND SONG VARIATION IN MOURNING (OPORORNIS PHILADELPHIA) AND RAY'S (O. TOLMIEI) WARBLERS. Jay Pitocchelli
	UTES OF NEW WORLD SANDERLINGS (CALIDRIS ALBA). J. P. Myers, M. Sallaberry A. Castro, L. M. Gordon, J. L. Maron, C. T. Schick, E. Tabilo, P. Antas, and T. Below.
IN MEMORIAM:	WILLIAM H. PHELPS JR. François Vuilleumier.
SHORT COMMU	NICATIONS
	Margins of the Hybrid Zone in Titmice of the Parus bicolor Complex in Coastal Texas. Keith L. Dixon ctions of Courtship Displays in Dabbling Ducks (Anatini). Frank McKinney, Lisa Guminski Sorenson, and t
Numbers of	tatus of the Coquette Hummingbird of Guerrero, Mexico. Richard C. Banks
	and F. M. Hunter
Molecular Se	Pair Bonding by Male Eurasian Wigeons in Relation to Courtship Activity. Juan A. Amat xing of Geese Using a Cloned Z Chromosomal Sequence with Homology to the W Chromosome. Thomat I, Fred Cooke, and Bradley N. White
Evidence for	Vocal Learning by a Scrub Jay. Tom Webber and Rosemary A. Stefani
COMMENTARIE	3
Male Parenta	al Investment and Female Competence in Yellow-headed Blackbirds. Kevin J. Cash and Scott Johnson
Response to	Cash and Johnson. David F. Gori
Comparison	on Eiders off Cape Cod: Compounded Errors or Changed Populations? Anthony J. Erskine
	Tome. Sarah Gaines
	. Edited by M. Ross Lein and Bruce M. Beehler
	O IN THE AUK

CONTENTS OF VOLUME 107

	Nootton, and P. D. Boersma
PLOVERS.	PERATURES AND BEHAVIOR OF CROWNED, BLACK-WINGED, AND LESSER BLACK-WINGED David Ward
E. Mirarchi,	TIVITY BUDGETS OF HATCHING-YEAR MOURNING DOVES. Michael P. Losito, Ralph and Guy A. Baldassarre
	IETRICS, AGE STRUCTURE, AND PARTIAL MIGRATION OF URBAN MERLINS. Ian G. Paul C. James, and Lynn W. Oliphant
	NOT IMPORTANT FOR FEMALE REPRODUCTIVE SUCCESS IN THE COMMON ROSEFINCH IS ERYTHRINUS). Mats Björklund
A COMPARATIVE Veiga	STUDY OF REPRODUCTIVE ADAPTATIONS IN HOUSE AND TREE SPARROWS. José P.
	NES IN RELATION TO TERRITORIALITY, BREEDING DENSITY, AND PARENTAL BEHAVIOR LLOW-HEADED BLACKBIRDS. Les D. Beletsky, Gordon H. Orians, and John C. Wing-
	TRICS ARE NOT ADEQUATE TO MEASURE AVIAN BODY SIZE. Scott Freeman and lackson
NUTRIENT RESER	EVE DYNAMICS OF BREEDING CANVASBACKS. Jeb A. Barzen and Jerome R. Serie
	D ECOLOGICAL CORRELATES OF TERRITORY QUALITY IN THE EURASIAN NUTHATCH PAEA). Erik Matthysen
	INTS OF RAPTORS AT HAWK MOUNTAIN, PENNSYLVANIA, AS INDICATORS OF POPULA- DS, 1934–1986. James C. Bednarz, Daniel Klem Jr., Laurie J. Goodrich, and Stanley
	PATTERNS OF SIZE AND SHAPE OF THE NASAL GLAND DEPRESSION IN PHALACRO- Douglas Siegel-Causey
EFFECTIVENESS C	OF SOCIAL STIMULI IN ATTRACTING LAYSAN ALBATROSS TO NEW POTENTIAL NESTING Thard H. Podolsky
	EST-SITE FIDELITY, AND REPRODUCTIVE PERFORMANCE IN BUFFLEHEADS. Gilles Gau-
	ND TEMPORAL VARIATION IN FORAGING ECOLOGY OF PROTHONOTARY WARBLERS E BREEDING SEASON. Lisa J. Petit, Daniel R. Petit, Kenneth E. Petit, and W. James
ANNUAL VARIA SEASON I	TION IN FORAGING ECOLOGY OF PROTHONOTARY WARBLERS DURING THE BREEDING isa J. Petit, Daniel R. Petit, Kenneth E. Petit, and W. James Fleming
COMPARATIVE CRACKER.	BREEDING BIOLOGY OF THE TWO BILL MORPHS OF THE BLACK-BELLIED SEED- Thomas Bates Smith
	PHOMETRIC, AND SONG VARIATION IN MOURNING (OPORORNIS PHILADELPHIA) AND RAY'S (O. TOLMIEI) WARBLERS. Jay Pitocchelli
	UTES OF NEW WORLD SANDERLINGS (CALIDRIS ALBA). J. P. Myers, M. Sallaberry A. Castro, L. M. Gordon, J. L. Maron, C. T. Schick, E. Tabilo, P. Antas, and T. Below.
IN MEMORIAM:	WILLIAM H. PHELPS JR. François Vuilleumier.
SHORT COMMU	NICATIONS
	Margins of the Hybrid Zone in Titmice of the Parus bicolor Complex in Coastal Texas. Keith L. Dixon ctions of Courtship Displays in Dabbling Ducks (Anatini). Frank McKinney, Lisa Guminski Sorenson, and t
Numbers of	tatus of the Coquette Hummingbird of Guerrero, Mexico. Richard C. Banks
	and F. M. Hunter
Molecular Se	Pair Bonding by Male Eurasian Wigeons in Relation to Courtship Activity. Juan A. Amat xing of Geese Using a Cloned Z Chromosomal Sequence with Homology to the W Chromosome. Thomat I, Fred Cooke, and Bradley N. White
Evidence for	Vocal Learning by a Scrub Jay. Tom Webber and Rosemary A. Stefani
COMMENTARIE	3
Male Parenta	al Investment and Female Competence in Yellow-headed Blackbirds. Kevin J. Cash and Scott Johnson
Response to	Cash and Johnson. David F. Gori
Comparison	on Eiders off Cape Cod: Compounded Errors or Changed Populations? Anthony J. Erskine
	Tome. Sarah Gaines
	. Edited by M. Ross Lein and Bruce M. Beehler
	O IN THE AUK

WILLIAM BREWSTER MEMORIAL	AWARD, 1989.	Noel F. R. Snyder	236
ELLIOT COUES AWARD, 1989.	Peter Berthold	***************************************	238
NOTES AND NEWS			59

NUMBER 2
Cercomacra manu, A New Species of Antbird from Southwestern Amazonia. John W. Fitz-patrick and David E. Willard
SEX AND AGE DIMORPHISM IN THE BARN OWL AND A TEST OF MATE CHOICE. Carl D. Marti
SEXUAL SIZE DIMORPHISM AND PARENTAL CARE PATTERNS IN A MONOMORPHIC AND A DIMORPHIC LARID. James S. Quinn
EXTRAPAIR FERTILIZATIONS AND THE EVOLUTION OF COLONIAL BREEDING IN PURPLE MARTINS. Eugene S. Morton, Lisa Forman, and Michael Braun
CLOACAL PROTUBERANCE AND COPULATORY BEHAVIOR OF THE ALPINE ACCENTOR (PRUNELLA COLLARIS). Masahiko Nakamura
Some Problems and Approaches in Avian Mate Choice. Kristine Johnson and John M. Marz- luff
COMPARATIVE POPULATION BIOLOGY OF FOUR PRIONS (GENUS PACHYPTILA) FROM THE INDIAN OCEAN AND CONSEQUENCES FOR THEIR TAXONOMIC STATUS. V. Bretagnolle, R. Zotier, and P. Jouventin
Breeding, Morphology, and Growth of the Endangered Dark-rumped Petrel. Felipe Cruz and Justine B. Cruz
ALTERNATIVE FOODS OF A DIET SPECIALIST, THE SNAIL KITE. Steven R. Beissinger
PROMISCUITY IN THE CATTLE EGRET (BUBULCUS IBIS). N. G. McKilligan
EFFECTS OF HUMAN DISTURBANCE ON BREEDING LEAST AND CRESTED AUKLETS AT ST. LAWRENCI ISLAND, ALASKA. John F. Piatt, Bay D. Roberts, Wayne W. Lidster, John L. Wells, and Scott A Hatch
FORAGING HABITAT PARTITIONING IN ROSEATE AND COMMON TERNS. Carl Safina
DENSITY EFFECTS ON ASYNCHRONOUS HATCHING AND BROOD REDUCTION IN EUROPEAN STAR LINGS. Philip C. Stouffer and Harry W. Power
COMPETITION BETWEEN EUROPEAN STARLINGS AND NATIVE WOODPECKERS FOR NEST CAVITIES IN SAGUAROS. Theodore A. Kerpez and Norman S. Smith
INTAKE RATES AND THE TIMING OF CROSSBILL REPRODUCTION. Craig W. Benkman
IMMEDIATE IMPACT OF THE 'EXXON VALDEZ' OIL SPILL ON MARINE BIRDS. John F. Piatt, Calvin J. Lensink, William Butler, Marshal Kendziorek, and David K. Nysewander
In Memoriam: Alfred E. Eynon. Joseph J. Hickey
IN MEMORIAM: WILLETTA LUESHEN. C. Stuart Houston
SHORT COMMUNICATIONS
Carbon Isotope Ratio of Feathers Reveals Feeding Behavior of Cormorants. Hiroshi Mizutani, Michio Fukuda, Yuko Kabay and Ettaro Wada
A Comparison of Radar Observations of Bird Migration at Haizhou Bay, China, and Guam, Marianas. Timothy williams and Mao Ying
Renesting by American Woodcocks (Scolopax minor) in Maine. Daniel G. McAuley, Jerry R. Longcore, and Greg F. Sej Egg Size and Parental Quality Influence Nestling Growth in the Shag. Trond Amundsen and Jogeir N. Stokland
Molt-Breeding Overlap in Northern Mockingbirds. Julia Zaias and Randall Breitwisch
Sexual Differences in Nest Attendance and Chick-feeding Rhythms of White Spoonbills. Eduardo Aguilera
Temporal and Geographic Homogeneity of Gene Frequencies in the Fox Sparrow (Passerella iliaca). Kevin J. Burns a Robert M. Zink
Evidence for Redetermination of Migratory Direction Following Wind Displacement. Frank R. Moore
Restriction Enzyme Cleavage of Nuclear DNA Reveals Differences in Repetitive Sequences in Two Species Pairs (Ficedinand Parus). Hans P. Gelter and Håkan Tegelström
Terminal-Egg Chilling and Hatching Intervals in the American White Pelican. Roger M. Evans Habitat Choice in Captive Arctic Warblers. Kristen C. Van Patten and Trevor Price
COMMENTARIES
A Note on Statistical Power. L. Scott Forbes
Body Size and Fecundity in Lesser Snow Geese. Ray T. Alisauskas and C. Davison Ankney
Response to Alisaussas and Arkiney. Fred Looke, J. Chris Davies, and R. F. Rockwell Do Point Counting and Spot Mapping Produce Equivalent Estimates of Bird Densities? Ludwik Tomiałojc and Ja Verner —————————————————————————————————
Response to Tomiałojc and Verner. Paul B. Hamel

100 YEARS AGO IN THE AUK	
NOTES AND NEWS	
ERRATA	***************************************
NUMBER 3	
REGIONAL DIFFERENCES IN HABITAT OCCUPANCY BY BACHMAN'S SPARROW. John and Bryan D. Watts	B. Dunning Jr.
COMPARISON OF PHENOTYPIC AND GENETIC DIFFERENTIATION IN SOUTH AMERIC (FORMICARIIDAE). Shannon J. Hackett and Kenneth V. Rosenberg	
THE RELATIONSHIP BETWEEN WING SHAPE AND DIFFERENTIAL MIGRATION IN T JUNCO. Robert S. Mulvihill and C. Ray Chandler	
FORAGING BEHAVIOR AND MICROHABITAT USE OF TWO SPECIES OF WHITE-EYES (ZOS SAIPAN, MICRONESIA. Robert J. Craig	***************************************
FORAGING BEHAVIOR, REPRODUCTIVE SUCCESS, AND COLONIAL NESTING IN OSPI Hagan III and Jeffrey R. Walters	REYS. John M.
FLOCK FORMATION OF TWO PARIDS IN RELATION TO CYCLICAL SEED PRODUCTION IN A I WOODLAND. Kimberly A. With and Michael L. Morrison	
VARIATION IN OSMOREGULATORY PARAMETERS OF CAPTIVE AND WILD HOUSE SPA DOMESTICUS). David L. Goldstein and Afshan Zahedi	
SEXUAL SEGREGATION BY HABITAT IN MIGRATORY WARBLERS IN QUINTANA ROO, M. Lopez Ornat and Russell Greenberg	***************************************
FOOD AVOIDANCE BY RED-WINGED BLACKBIRDS CONDITIONED WITH A PYRAZINE C L. Avery and Curtis O. Nelms	***************************************
AGONISTIC BEHAVIOR AND DOMINANCE RELATIONSHIPS AMONG LESSER SNOW GEESE AND SPRING MIGRATION. Paul E. Gregoire and C. Davison Ankney	***************************************
SEASONAL VARIATION IN COLD HARDINESS AND PEAK RATES OF COLD-INDUCED THE THE DARK-EYED JUNCO (JUNCO HYEMALIS). David L. Swanson	***************************************
ROOSTING BEHAVIOR OF POSTFLEDGING EASTERN SCREECH-OWLS. James R. Belthoff ison	
EFFECTS OF BROOD SIZE AND NESTLING AGE ON PARENTAL CARE BY MALE FIELD SPAIPUSILLA). Michael Carey	
ESTIMATING THE EFFECT OF WIND ON AVIAN METABOLIC RATE WITH STANDARD (PERATURE. George S. Bakken	***************************************
ESTIMATING NEST SUCCESS: WHEN MAYFIELD WINS. Douglas H. Johnson and Terr	"
IN MEMORIAM: MARGARET HOWELL MITCHELL. Marianne Gosztonyi Ainley	
IN MEMORIAM: SIR PETER MARKHAM SCOTT. Gustav A. Swanson	
SHORT COMMUNICATIONS Providing Status and Sec of Common Museus (Unic soles) as a Colony in Autumn M. P. Marris on	4.6.1411
Breeding Status and Sex of Common Murres (Uria salge) at a Colony in Autumn. M. P. Harris an Interspecific Competition and Social Behavior in Violet-green Swallows. Jeffrey D. Brawn	
Hurricane Damage to Red-cockadod Woodpecker (Ficoides borealis) Cavity Trees. R. Todd Engs Evans	trom and Gregory W
Geographic Variation in the Juvenal Plumage of the Common Nighthawk (Chordeiles minor) in No W. Dickerman	rth America. Robe
Analysis of Mitochondrial DNA of Pacific Black Brant (Branta bernicla nigricans). Gerald F. Shields	
Song Features Birds Use to Identify Individuals. Daniel M. Weary, Ken J. Norris, and J. Bruce Falls Effects of Unit Size and Territory Defense on Communal Nest Care in the Hoatzin (Opistheco VanderWerf and Stuart D. Strahl	
BOOK REVIEWS. Edited by M. Ross Lein and Bruce M. Beehler	
100 TEAKS AGO IN THE AUK	***************************************

RAPID ATROPHY AND HYPERTROPHY OF AN AVIAN FLIGHT MUSCLE. Abbot S. Gaunt, Robert S. Hikida, Joseph R. Jehl Jr., and Lisa Fenbert
PATTERNS OF NUTRIENT AND ENERGY EXPENDITURE IN FEMALE COMMON EIDERS NESTING IN THE HIGH ARCTIC. Howard Parker and Halvor Holm6
INFLUENCES OF TIME POSTMORTEM, FEEDING ACTIVITY, AND DIET ON DIGESTIVE ORGAN MORPHOLOGY OF TWO EMBERIZIDS. Robert J. Robel, Michael E. Barnes, Kenneth E. Kemp, and John L. Zimmerman
MARINE BERDS FEED AT GRAY WHALE MUD PLUMES IN THE BERING SEA. Bryan S. Obst and George L. Hunt Jr
ANNUAL VARIATION OF PRIMARY MOLT WITH AGE AND SEX IN CASSIN'S AUKLET. S. D. Emslie, R. P. Henderson, and D. G. Ainley6
Tests of Three Hypotheses of Hatching Asynchrony in the Common Tern. Patricia Blair Bollinger, Eric K. Bollinger, and Richard A. Malecki
SPECIATION, HETEROCHRONY, AND GENETIC VARIATION IN HISPANIOLAN PALM-TANAGERS. Mara A. McDonald and Michael H. Smith
THE ROLE OF PROLACTIN IN PARENTAL CARE IN A MONOGAMOUS AND A POLYANDROUS SHORE- BIRD. Cheri L. Gratto-Trevor, Lewis W. Oring, Albert J. Fivizzani, Mohamed E. El Halawani, and Fred Cooke
VARIATION IN PIED FLYCATCHER (FICEDULA HYPOLEUCA) MITOCHONDRIAL DNA. Håkan Tegelström, Hans P. Gelter, and Maarit Jaarola
GENETIC VARIATION AND DIFFERENTIATION IN THE SPOTTED OWL (STRIX OCCIDENTALIS). George F. Barrowclough and R. J. Gutiérrez
AMERICAN WOODCOCK WINTER DISTRIBUTION AND FIDELITY TO WINTERING AREAS. Duane R. Diefenbach, Eric L. Derleth, W. Matthew Vander Haegen, James D. Nichols, and James E. Hines
INDIVIDUAL VARIATION IN BEHAVIOR AND BREEDING SUCCESS OF NORTHERN FULMARS. Scott A. Hatch
INCUBATION AS A REPRODUCTIVE COST IN FEMALE WOOD DUCKS. Gary R. Hepp, Robert A. Kennamer, and William F. Harvey IV
FEMALE-BIASED SEX RATIO AT HATCHING IN THE GREEN WOODHOOPOE. J. David Ligon and Sandra H. Ligon
SHORT COMMUNICATIONS
Brood Reduction and Parental Infanticide in Heermann's Gull. Lena P. Urrutia and Hugh Drummond
Cover Use and Predator-related Mortality in Song and Savannah Sparrows. Bryan D. Watts
Notes on Longevity and Flightlessness in Bristle-thighed Curlews. Jeffrey S. Marks, Roland L. Redmond, Paul Hendricks, Roger B. Clapp, and Robert E. Gill Jr
Possible Causes of Territory Takeovers in a North-temperate Population of House Wrens. L. Scott Johnson and L. Henry Kermott
Measures of Wing Area and Wing Span from Wing Formula Data. Duncan Stuart Evered
A Method of Combined Skin-Fluid Specimen Preparation. N. W. Longmore and Walter E. Boles
BOOK REVIEWS. Edited by M. Ross Lein and Bruce M. Beehler
100 YEARS AGO IN THE AUK
Notes and News
ERRATUM
INDEX TO LANDER 107 Compiled by V. Elizabeth V. Decale